

Abstract of the Disclosure

A partial fragment of chromosome 7 derived from human normal fibroblast is introduced into a mouse ES cell (embryonic stem cell) by a microcell method, using the ES cell, a chimeric mouse is obtained which harbors human chromosome fragment in a normal tissue, and which expresses human CYP3A4 gene in liver and small intestine due to induction by a drug. Also, to disrupt mouse endogenous P450 genes, a physical map relating to Cyp3a genes on mouse chromosome 5 is prepared, and also vectors necessary for gene targeting are prepared based on the physical map. By using the vectors, a mouse that has human P450 genes (CYP3A family) and in which mouse endogenous P450 genes (Cyp3a family) have been disrupted is prepared.